

We thank the Associate Editor and referees for their suggestions. We have updated the manuscript as outlined below.

Associate Editor

You will note that Ref#2 still has a few minor suggestions/questions which I feel you should incorporate, the issue of the regression fit through 0 for Figure 2 was also raised again by Ref#1, in the sense that he/she recommended that you provide your arguments (and perhaps the the comparison of the outcome when forcing the intercept through zero or not) in the final manuscript, as this would be an obvious question for readers.

We have added our rationale for doing this to the methods, but also added both types of regression outputs as a new Fig. S1.

Two additional technical corrections:

-in Table 1, please use one decimal for the estimated contribution of C4 material (to be consistent with those for C3 material)

Updated to 1 decimal place.

-in the ms, please specify (Methods and/or elsewhere) whether C:N ratios are presented on a molar or weight basis.

Noted in the methods that is weight basis.

Referee 1

No specific comments.

Referee 2

I have some minor points throughout the ms that may need consideration:

- concerning the point of the other reviewer on figure 2. I do not understand the author's reasoning for not forcing y-intercept = 0. Would those results change any conclusions of your study? By definition, there cannot be a change at t=0. Also, you demonstrate that your r² values look way better with y-intercept = 0; that in away supports this model, doesn't it?

We have added our rationale for doing this to the methods, but also added both types of regression outputs as a new Fig. S1.

Page 2, last line: "C is produced belowground" I would rather go with biomass or organic matter, but carbon is not exactly produced therer, rather allocated

Update to 'organic matter'

Page 11 line 11: hyphenate short term

Updated throughout.

line 27: give your values here again for the Sarcocornia/Sporobolus

It is unclear what the referee is referring to here, so no change has been made

Page 12

line 4: "a distinction was observed [...]" please state what distinction exactly, not clear here

Sentence has been re-worded to clarify this.

line 11 "higher than predicted tides" please use a comma here to make this phrase clear

Comma already included in the appropriate place.

line 35 why are you bringing up the terms rush and non-rush here if you don't use them in the following?

This terminology is used in multiple instances through the manuscript to emphasise the differences in vegetation structure.

line 38: is turnover data available for Juncus then?

Not explicitly. Clarke and Jacoby (1994) report that culms are replaced on an approximately annual basis (though with no clear seasonal pattern). As the relevant annual aboveground biomass production (1116 g m⁻²) is mentioned in the previous sentence, we have not repeated this statistic here.

Page 13

line 1-2: is data on belowground biomass available?

It is unclear as to what text the referee is referring to here. We note that Clarke and Jacoby (1994) do report single measurement data for belowground biomass, but we have chosen not to report that here.

line 27: please make clear again what is meant by "mineral biased deposition"

Sentence re-worded to clarify this.

line 37: bulk deposition = mineral + organic materials? -> please make clear here again

Updated as 'bulk deposition (i.e. mineral plus organic matter)'